

## Abstract

A sensor element (10) is described, which is used in particular for detecting a physical property of a measuring gas, preferably for determining the oxygen partial pressure in an exhaust gas of an internal combustion engine. The sensor element (10) contains at least one  
5 electrochemical measuring cell, which includes a first electrode (31, 131) and a second electrode (32, 132), which are electrically connected by a solid electrolyte (21, 121, 122, 125). The second electrode (32, 132) is in a gas chamber (41, 141), which is connected to the measuring gas located outside the sensor element (10) via a first element (61, 161) having a catalytically active material and a second diffusion-limiting element (62, 162). The first  
10 element (61, 161) has a length of at least 1 mm in the diffusion direction of the measuring gas.

(Figure 1)